

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,031	11/03/2003	Mehmet Hancer	169.12-0621 3406	
164 KINNEY & LA	7590 05/04/200 NGE, P.A.	7	EXAMINER	
THE KINNEY	& LANGE BUILDING		DAVIS, DAVID DONALD	
312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002			ART UNIT	PAPER NUMBER
	,		2627	
			MAIL DATE	DELIVERY MODE
		•	05/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•		Application No.	Applicant(s)			
Office Action Summary		10/700,031	HANCER ET AL.			
		Examiner	Art Unit			
		David D. Davis	2627			
Period for	- The MAILING DATE of this communication app r Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) 🖂 F	Responsive to communication(s) filed on <u>25 Ju</u>	lv 2006				
		action is non-final.				
3) 🔲 🤄	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E					
Dispositio	on of Claims					
4) 🛛 (	Claim(s) <u>1-21</u> is/are pending in the application.					
	4a) Of the above claim(s) <u>15-21</u> is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
6)⊠ (						
	Claim(s) <u>4 and 10</u> is/are objected to.					
8) 🔲 (	Claim(s) are subject to restriction and/or	election requirement.				
Applicatio	on Papers					
9)□ ⊤	he specification is objected to by the Examiner					
	he drawing(s) filed on is/are: a) acce		Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction					
	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority ur	nder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
•	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
3	3. Copies of the certified copies of the priority documents have been received in this National Stage					
<b>+</b> 0 -	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  1) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
9) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6)  Other:						

#### **DETAILED ACTION**

#### Election/Restrictions

1. Claims 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on July 25, 2006.

# Information Disclosure Statement

2. Receipt is acknowledged of the Information Disclosure Statement (IDS) received December 8, 2003 and November 3, 2003.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurano et al (US 6,617,762). As per claim 1, Kurano et al shows in figures 9 and 10 an improved actuation system for positioning a slider 4 carrying a transducing head. The actuation system of the type having a movable actuator arm 3, a head suspension 5, a microactuator 2, a flexure, a slider 4 and a transducing head carried by the slider 4. The improvement includes an encapsulant having a self assembled monolayer 16 covers exposed surfaces of a component selected from the group

consisting of the microactuator 2, the slider 4, a disc spacer, surface mount components on a printed circuit card assembly, and ceramic components of the actuation system. As per claim 6, Kurano et al discloses in column 5, lines 37-62 the encapsulant selectively adheres to ceramic surfaces of the slider 4 body.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 1-3, 6, 8-9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurano et al (US 6,617,762) in view of Feng et al (2004/0223256). Kurano et al shows in figures 9 and 10 an improved actuation system for positioning a slider 4 carrying a transducing head. The actuation system of the type having a movable actuator arm 3, a head suspension 5, a microactuator 2, a flexure, a slider 4 and a transducing head carried by the slider 4. The

improvement includes an encapsulant having a layer 16 that covers exposed surfaces of a component selected from the group consisting of the microactuator 2, the slider 4, a disc spacer, surface mount components on a printed circuit card assembly, and ceramic components of the actuation system. Kurano et al discloses in column 5,lines 37-62 the encapsulant selectively adheres to ceramic surfaces of the slider 4 body.

Kurano et al is silent as to the layer being a monolayer.

Feng et al shows in figure 3 monolayer 310. In section [0018] Feng et al discloses that the monolayer is formed from organosicion (such as alkyl trichlorosilane).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to specify that the layer of Kurano et al was a monolayer as taught in Feng et al. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to specify that a layer was a monolayer to reduce the head spacing. See Feng et al section [0006].

8. Claims 5, 7, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurano et al (US 6,617,762) in view of Feng et al (2004/0223256) and Koka et al (US 5,781,377). Kurano et al is silent as to encapsulating a slider. Koka et al shows in figure 3 and encapsulated slider.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the slider of Kurano et al with an encapsulated slider as taught by Koka et al. The rationale is as follows: one of ordinary skill in the art at the time the

invention was made would have been motivated to provide an encapsulated slider so as to protect the slider from damage.

#### Allowable Subject Matter

9. Claims 4 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is 571-272-7572. The examiner can normally be reached on Monday thru Friday between 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/700,031

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-2000.

David D. Davis

Primary Examiner

Page 6

Art Unit 2627

ddd